

What is claimed is:

- 1 1. A method for adjusting the traffic carried by a network, including:
  - 2 determining a quality of service requirement with respect to a first
  - 3 type of information carried by the network;
  - 4 determining the performance of the network with respect to the first
  - 5 type of information;
  - 6 if the performance of the network does not meet the quality of service
  - 7 requirement for the first type of information, then formulating a
  - 8 network status message based upon the network status message and
  - 9 the performance of the network, wherein the network status message
  - 10 is adapted to instruct an end-user terminal to change the way in which
  - 11 the end-user terminal sends information to the network; and
  - 12 sending the network status message to an end-user terminal.
- 1 2. The method of claim 1, wherein the end-user terminal is a wireless appliance.
- 1 3. The method of claim 2, wherein the wireless appliance is a wireless  
2 telephone handset.
- 1 4. The method of claim 1, wherein the first type of information includes  
2 electronic mail information.
- 1 5. The method of claim 1, wherein the first type of information includes world  
2 wide web information.
- 1 6. The method of claim 1, wherein the first type of information includes video  
2 information.

1 7. The method of claim 1, wherein the first type of information includes a  
2 digital electronic file.

3 8. The method of claim 1, wherein the network status message instructs the  
4 end-user terminal to change the rate at which the terminal sends information to the  
5 network.

1 9. The method of claim 1, wherein the network status message instructs the  
2 end-user terminal to change the compression scheme used by the terminal to  
3 compress information that the terminal sends to the network.

1 10. The method of claim 1, wherein the network status message instructs the  
2 end-user terminal to send information to the network by specifying at least one from  
3 the group of: the rate at which the end-user terminal can send a second type of  
4 information to the network, the compression scheme that the end-user terminal is to  
5 use for the first type of information, and a type of information that the end-user  
6 terminal is permitted to send to the network.

1 11. The method of claim 1, wherein formulating the network status message  
2 based upon the performance of the network and the quality of service requirement  
3 with respect to the first type of information includes determining if the network can  
4 meet the quality of service requirement for the first type of information.

1 12. The method of claim 11, wherein if the network cannot meet the quality of  
2 service requirement for the first type of information, then formulating the network  
3 status message to instruct the terminal to decrease the rate at which the terminal  
4 sends at least one type of information other than the first type to the network.

1 13. The method of claim 11, wherein if the network cannot meet the quality of  
2 service requirement for the first type of information, then formulating a network

1 status message to instruct the terminal to change the compression scheme used in  
2 sending information of a type other than the first type to the network.

1 14. The method of claim 11, wherein if the network cannot meet the quality of  
2 service requirement for the first type of information, then formulating a network  
3 status message to instruct the terminal to change the compression scheme used in  
4 sending the first type of information to the network.

1 15. The method of claim 1, wherein a wireless terminal is coupled to the network  
2 when the wireless terminal registers with the network, and wherein sending a  
3 network status message includes forming a network status message, addressing the  
4 message to a wireless terminal, and transmitting the message to the wireless  
5 terminal, and wherein a network status message is only addressed and transmitted to  
6 a wireless terminal when the wireless terminal is coupled to the network.

1 16. The method of claim 1, wherein the network is partitioned into a plurality of  
2 cells, wherein a wireless terminal belongs to a cell, and further including the steps of  
3 selecting a subset of cells and sending the network status message only to wireless  
4 terminals that belong to one of the selected subset of cells.

1 17. The method of claim 1, further including the steps of identifying a source of  
2 network congestion, and sending a network status message that reduces the amount  
3 of the second type of information originating from a wireless terminal substantially  
4 at the identified source of network congestion.

1 18. The method of claim 1, wherein sending the network status message includes  
2 broadcasting a network status flag to wireless terminals coupled to the network.

1 19. The method of claim 1, wherein sending the network status message includes  
2 multicasting a network status flag to wireless terminals coupled to the network.

1 20. The method of claim 1, wherein the quality of service requirement is a  
2 maximum latency measurement for a first type of information sent over the network.

1 21. The method of claim 1, wherein the first type of information is voice  
2 information, and wherein the quality of service requirement for voice information  
3 includes a maximum error rate for voice transmissions delivered over the network.

1 22. A system for assuring the quality of service delivered by a network for a  
2 preferred type of information, comprising:  
3 means for determining a preferred type of information for the network;  
4 means for determining a quality of service requirement for the preferred type  
5 of information;  
6 means for determining the performance of the network with respect to the  
7 preferred type of information; and  
8 means for changing a parameter by which non-preferred information is sent  
9 to the network by an end-user terminal coupled to the network when the  
10 network cannot meet the quality of service requirement for the preferred  
11 information.

1 23. An apparatus for adjusting the traffic sent to a network from an end-user  
2 terminal, comprising:  
3 a processor;  
4 a memory coupled to said processor, said memory storing network status  
5 manager instructions adapted to be executed by said processor to identify a  
6 quality of service requirement for a preferred type of information carried by  
7 the network, determine the quality of service with which the network is  
8 delivering the preferred type of information, formulate a message to an end-  
9 user terminal coupled to the network to change a parameter by which the  
10 end-user terminal sends information to the network.

11 24. The apparatus of claim 23, wherein a parameter by which the end-user  
12 terminal sends information to the network identifies the rate at which the end-user  
13 terminal sends a type of information to the network.

1 25. The apparatus of claim 23, wherein a parameter by which the end-user  
2 terminal sends information to the network identifies the compression technique used  
3 for a type of information sent to the network.

1 26. The apparatus of claim 23, wherein a parameter by which the end-user  
2 terminal sends information to the network identifies a type of information that the  
3 end-user terminal is permitted to send to the network.

1 27. The apparatus of claim 23, wherein a parameter by which the end-user  
2 terminal sends information to the network identifies a type of information that the  
3 end-user terminal is not permitted to send to the network.

1 28. A digital data signal adapted to be received by an end-user terminal coupled  
2 to a network, the data signal made by steps including:  
3 determining a quality of service requirement for the network for a preferred  
4 type of information;  
5 determining the quality of service delivered by the network with respect to  
6 the preferred type of information; and  
7 if the quality of service delivered by the network is less than the quality of  
8 service requirement, then formulating a status message adapted to instruct  
9 the end-user terminal to change a parameter by which it sends information to  
10 the network.

1 29. The digital data signal of claim 28, wherein the status message includes a set  
2 of digital bits, and wherein a bit in the status message prohibits an end-user terminal

3 from sending a non-preferred type of information to the network, and the  
4 complement state of the bit permits an end-user terminal to send the non-preferred  
5 type of information to the network.

1 30. The digital data signal of claim 28, wherein the status message includes a set  
2 of digital bits, and wherein the set of bits in the status message include a  
3 configuration number that instructs the end-user terminal how to send information to  
4 the network.

1 31. The digital data signal of claim 28, wherein the status message includes a set  
2 of digital bits, and wherein the set of bits in the status message comprise a  
3 compression number that instructs the end-user terminal which compression  
4 protocol to use to send a type of information to the network.

1 32. The digital data signal of claim 28, wherein the status message includes a set  
2 of digital bits, and wherein the set of bits in the status message comprise a  
3 bandwidth number that identifies to the end-user terminal the maximum rate at  
4 which a certain type of information can be sent to the terminal.

1 33. The digital data signal of claim 28, wherein the status message includes a set  
2 of digital bits, and wherein the set of bits in the status message comprise an  
3 information type number that specifies a specific type of information to which the  
4 rest of the status message pertains.

1 34. A medium storing instructions adapted to be executed by a processor to  
2 identify a quality of service requirement for the preferred type of information for a  
3 network, determine the quality of service that the network can deliver for the  
4 preferred type of information, and if the quality of service that the network can  
5 deliver for the preferred type of information is less than the quality of service  
6 requirement, then formulating a message to an end-user terminal that instructs the

7 end-user terminal to change a parameter by which it sends non-preferred information  
8 to the network.

1 35. The medium of claim 34, wherein the preferred type of information is voice  
2 information.

1 36. The medium of claim 34, wherein the preferred type of information is  
2 electronic mail information.

1 37. The medium of claim 34, wherein the preferred type of information is world  
2 wide web information.

1 38. The medium of claim 34, wherein the quality of service includes a maximum  
2 latency.

1 39. The medium of claim 34, wherein the quality of service includes a maximum  
2 error rate.

1 40. The medium of claim 34, wherein the parameter that the message instructs  
2 the end-user terminal to change is the rate at which the end-user terminal sends non-  
3 preferred information to the network.

1 41. The medium of claim 34, wherein the parameter that the message instructs  
2 the end-user terminal to change is the compression scheme used by the end-user  
3 terminal for a type of information that the end-user terminal sends to the network.

1 42. The medium of claim 34, wherein the parameter that the message instructs the  
2 end-user terminal to change is the rate at which the end-user terminal sends preferred  
3 information to the network.